

## **Digital Divide-Access and Use of New Information Communications Technology among Indian Rural Females**

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**Abstract:** The present paper is an attempt to look at the knowledge, use and access of digital media by adolescent of rural Indian females. Increasingly new information and communication technology has become part of mainstream Indian's means of communication. It is deeply embedded in the education, social lives and business world. In the age of new media the use of digital media is needed for full participation in contemporary society of India. However, the issue of the digital divide has caused a social divide affecting the gap between information rich and poor. Indian rural adolescent females are suffered from various reasons and away from several issues due to their differential access, use and knowledge about digital media technology. This has significance in the development of their identity, skills in the digital media culture, and place in the world of new media. It will also address the question of how inclusion and more meaningful participation is possible and what form of representation will be most successful in creating a positive identity of rural females use this digital media. The present research is to propose to use survey research method to analyses and find the digital divide among adolescent of rural Indian females and its causes and effects.

**Key words:** Digital Divide, Rural Adolescent Females, India and Information communication Technology.

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### **I. Introduction**

India is one of the world's fastest growing economies, which have seen enormous growth in recent years. The trade press is rich with stories about India's booming IT industry than has resulted in burgeoning middle class mostly in urban India. Urban centers have seen an influx of young women from semi-urban and rural parts of the country, living alone and redefining them. However the story of empowerment for women is not a singular narrative, rather it is located in a complex set of caste, class, religious, ethnic identities and rural and urban. Indian rural women's economic opportunities remain restricted by social, cultural, and religious barriers. Any assessment of the status of women has to start from the social framework, social structures, cultural norms and value system that influence social expectations regarding the behavior of both men and women and determine women's role and their position in society. A society is composed of many institutions and most important of them are the system of decent, family and kinship, marriage and religious traditions. They provide the ideology and moral basis for men and women about their rights and duties and their status and role. In rural Indian women status is still worse condition, the rural women suffer for the denial of freedom even in their homes, repression and unnatural indoctrination, unequal and inferior status, rigid cast hierarchy and untouchability. Consequently most women were reduced to dumb cattle and had led to inhuman beastly life. Woman in rural India has been victim of humiliation, torture and exploitation. There are many episodes like rape, murder, dowry, burning, wife beating and discrimination in the socio-economic and educational fields. Indian society itself is pre-dominated by men; hence women are a victim of male domination in the respective sphere of life.

Even after 66 years of India's independence, the country is still facing pressing problem in dealing with its rural poor and how to increase their income level. According to the 2011 census report the total population in India is 1,21,01,93,422 the male population is 62,37,24,248 and female population is 58,64,69,174 the density of population for sq.km is 382. The population growth rate is 17.64%, sex ratio is 940 females of 1000 males. The total literacy rate of the country is 74.04%, male literacy rate is 82.14%, and female literacy rate is 65.46%. The rural-urban distribution of population is 68.84% and 31.16%. The rural populace are living in more than 600,000 villages spread over 27.60 lakh sq.km, across India with very poor or no minimum infrastructure like roads, transport, power, clean drinking water, healthcare, education and information and communication system, it is further pushing them to poverty. Still remarkable population of the country is living under below poverty line.

In India, around 70% of its total population lives in the rural areas, they all have the right to acquire information; but it is almost impossible to except that people at grass root level, living in rural areas, and those who have only elementary education, to participate actively in the world of information and communication which is solely based on computers and the Internet. The exponential growth of the use of new information communication technologies has had a profound impact on many aspects of daily life. Over the past few

decades, NICTs have dramatically transformed the societies and the economies around the world. Today, NICTs have become an essential part of modern culture and cover almost all aspects of life. With advanced NICTs, especially the Internet, the world has today become like a global village. Although developed countries enjoy the benefits of NICTs in almost all areas of life, developing countries do not benefit from these technologies. As a result of advances in information technologies, the knowledge gaps between the information-rich and information-poor have deepened over time and that has caused excluding certain part of the world from enjoying the fruits of global village (Iskandarani, 2008). Then, the world has begun to notice the phenomenon, named as the digital divide.

New information communication technologies are proving to be critical tools in rural development: social services, income generating activities and governance. However, rural people especially the poorest of the poor and Indian rural female are still neglected. Efforts need to concentrate on reducing access costs, creation of enabling environment, developing key technologies, development relevant local languages content, joint efforts by public and private agencies, developing support infrastructure such as roads and power, dedicated venture capital fund, encouraging mass e-literacy, and leading of NICT initiatives by women and other underprivileged groups.

In the last decades, the world has begun to undergo a new technologically-driven revolution, allegedly leading toward what is commonly called "the Information Age." Impelled by the phenomenal proliferation of computers and information devices, closely linked to an explosion of processing and access speeds, ever-lowering costs of memory and other critical components, convergence of images, sounds and writing in one digital medium, and propagated by a worldwide network of satellites and broadband fiber optic cables, this Information Age already is a reality to millions in all countries of the world. To be sure, this revolution is part of the long-term development of electronic communication technologies that includes: in the nineteenth century, the telegraph and telephone; in the mid-twentieth, broadcast media like radio and television; more recently, networks like Ernet in India or Ethernet in the U.S. But the last two decades have seen an explosive and unprecedented growth in these commonly called 'new information and communication technologies (NICTs).' The "digital divide" is widely regarded as a unitary phenomenon. And as a first approximation, it is indeed useful to distinguish, in a general way, between the rich and powerful who are part of the Information Age and the poor and powerless those are not. But viewed analytically, there is not one, there are three digital divides -- and emerging in many nations a fourth. The divide is that which exists within every nation, industrialized or developing, between those who are rich, educated, and powerful, and those who are not. Another digital divide, less often noted, is linguistic and cultural. In many nations this divide separates those who speak English. Information is the key to democracy. With the advent of Information Technology (IT), it has become possible for common man to access global information. Information in a broader sense includes oral communication, voice in telephony, text in fax and newspapers, images in video and television broadcasting, and data in computers. All information can be digitized, transported, stored, retrieved, modified and then distributed. Emerging digital techniques, new network alternatives including intelligent networks, high bandwidth communication technology and state-of-the-art software for network functions and services, are the new technology trends evident in the development of electronic communication systems. The swift emergence of a global "information society" is changing the way people live, learn, work and relate. An explosion in the free flow of information and ideas has brought knowledge and its myriad applications to many millions of people, creating new choices and opportunities in some of the most vital realms of human endeavor. Yet most of world's population remains untouched by this revolution. The paper discusses the need to focus on Indian rural communities to empower them to access information, knowledge and poverty alleviation among them by deploying the Information and Communication Technologies (ICTs). Analyses the factors preventing rural communities from reaping the benefits of ICTs, Indian initiatives to overcome the factors, ways and means of poverty alleviation and sustainable development; identifies the bottlenecks and solutions, and lessons learned.

## **II. Concept of Digital Divide**

There has been much discussion the debate about the concept of digital divide and of the empirical analyses of its components. The notion of a digital divide gained attention in the 1990s with recognition that some people and institutions were not going online or were not onto broadband. The concept of a digital divide between technological 'haves and have not's' has been a useful tool in efforts to bring greater, more equal access to powerful new information and communication technologies like the Internet. The term digital divide is used to describe situations in which there is a market gap in access to the use of new information communication devices. In generally the term digital divide refers to 'the gap between individuals, households, business and geographic areas at the different socio-economic levels with regard to their opportunities to access and use of new information communication technologies and Internet. It reflects difference among and within the countries. Digital divide exists in variety of other levels; sector, community, and individual level with regard to use access of new information communication technologies. Further digital divide is also referred to as 'the

spiral of uneven access and usage of new information communication technologies and the socio-economic rebound causes that have caused the emergence of information inequality throughout the globe, both in and between the countries and also locally in communities.

The term ‘digital divide’ was introduced by Larry Irving, Jr., former Assistant Secretary of Commerce for Telecommunication and Communication in the mid-1990s in order to focus public attention on the existing gap in access to information services between those who can afford to purchase the computer hardware and software necessary to participate in the global information network, and low income families and communities who cannot. Some other scholars have defined digital divide as ‘an inequality in access, distribution, and use of new information communication technologies between two or more population.’ Digital divide will be in eight aspects: physical, financial access, cognitive access, design access, content access production access, institutional access and political access. In the field of new information communication technologies the scholars have refers the digital divide to unequal patterns of material access to usage capabilities of, and benefits from computer-based information and communication technologies that are caused by certain stratification processes that produce classes of winners and losers of the information society, and participation in institutions governing new information communication technology and society.

Thus digital divide can be defined as economic, social or cultural deprivation generated by missing new information communication technologies access and skills. This definition goes beyond conventional definitions and it has number of practically important characteristics. First, it explicitly spells out the three different dimensions where digital divides are important and where new information communication technologies make a difference. In the modern knowledge and information based world, economic opportunities, such as employability, depend on information communication technologies access and skills. Information communication technologies, however, also play an increasingly important role in all social relationships, ranging from political participation to connecting local communities, friends and the family. Second, in the global and culturally diversified world, new information and communication technologies are also increasingly important for access to cultural resources and expression. Third, the definition also replaces traditional technology focused characterizations of digital divide, noting that lack of technology; per-se is not always a problem. It is clear that technology remains inert and useless with knowledge and capabilities to use them, and when they are embedded in social without necessary human skills and competences.

The digital divide is not a problem for developing countries, but also for developed countries. As in the developing countries of today, developed countries also have some inequalities between new information communication technologies ‘have’ and ‘have-nots’. This statement is accepted by United States one of the leading knowledge economies and network societies, it faces the digital divide: income-related distributional inequalities regarding home personal computer ownership across the nation. Geographic inequality in access to information and communication services exists in Japan also. There are many types of the digital divide at local, national, regional or world levels, such as the gender divide, the age divide, the income divide, each such divide having its specific background phenomena, evolution trends, perspectives as well as its specific bridging solutions and initiatives. Because of the continuous development of information technologies and the emergence of new technologies, the digital divide is a dynamic problem in the world and even in India.

### **III. Digital divide in India**

India has achieved to a great extent of new information communication technologies growth but lagging behind in diffusion of information technologies. There are some initiatives are taking place for diffusion of information technologies from different stakeholders but comparing the vastness of the economy; these are isolated cases and mostly concentrated in urban areas and organized sectors only. India is a snake with its head in the 21<sup>st</sup> century and its tail in the 17<sup>th</sup> century. Loaded with 16% of the world’s population, more are less 30% of its population is in the below poverty line. This means that these people have no proper basic infrastructure like drinking water, electricity, sanitary facilities and well over 35% of population is illiterates. More than 65% population is live in the alienated rural area and 60% earn their livelihood from agriculture. India’s efforts to capitalize on the new information communication technology revolution are far from spectacular when it comes to numbers, going by the latest country rankings and associated data released by the International Telecommunication Union.

New information communication technologies have emerging at a rapid pace and it’s already been a part in the field of business, economy, entertainment, social groups all over the globe and India too. The rise of new information communication usage across the country unlocked various new businesses, products, services. These technologies have constantly changing the way consumers shop and businesses sell their products. A country of a more than a 1.21 billion population has to do lot in the area of new information communication usage to catch up with globe pace. Several studies have indicating that only a few million people have broadband connection in India. The reach of these new information communication technologies is limited to certain class and section of the society. All modern facilities are concentrating in urban areas and these facilities

will be enjoying by the urban class compare to poor rural class. The new information communication technologies also mostly located in urban centers

#### **ICT development ranking of select countries**

Country	ICT development ranking	ICT development index	Access sub-index ranking	Use sub-index ranking	Skills sub-index ranking
India	121	2.21	122	121	117
China	78	4.18	80	66	93
Pakistan	129	1.83	119	132	143
Bangladesh	135	1.73	133	139	127
Sri Lanka	107	3.06	104	115	90
US	17	7.53	29	14	3
Brazil	62	5	67	57	72
Korea*	1	8.57	11	2	1
Sweden	2	8.45	7	1	15
Iceland	3	8.36	3	7	10
Niger**	157	0.99	148	152	157

(Source ITU)

The above tables shows that India has been ranked 121<sup>st</sup> among 157 countries in terms of progress in the realm of new information communication technologies in a newly released report of the International Telecommunication Union which makes an annual assessment based on a wide range of parameters and data. The ranking has been made on the basis of an ICT Development Index, a benchmark made with several indicators. The above table clearly indicates the low penetration of new information communication technologies in India. Although most of the rural poor in India are isolated from the information revolution, there are several examples in rural India where new information communication technologies are used to contribute to poverty reduction in the areas of opportunity, empowerment and security.

In India, even where telephone lines have reached rural areas through the introduction of Public Call Offices (PCOs), the rural poor have indeed very limited access to new information communication technologies. Majority of poor households have radio and television sets in their home. Even telephone and newspaper are available to the majority of household on a shared basis. Only few families have shared access to computer or Internet connection. The owning computer and Internet connection in rural India is very limited. Even some families never have and never viewed television, read newspaper or used the telephone. Several surveys also found that mobile communication is rapidly occupying rural India. But these mobile communications do not adequately satisfy their information needs. This indicates that new information communication technologies could play a pivotal role in improving access to information by the rural poor. However, it remains very difficult for people with low levels of education to reap the full benefits of new technologies including the wide access to knowledge and information. New information communication technologies do play an important role in disseminating a wide range of information and advice leading to knowledge and attitude change among rural communities. However, the continuing digital divide between urban and rural areas and between men and women currently constrain the realization of the full potential of new information communication technologies in reaching rural area.

#### **Indian Rural Women and Digital Divide**

In India rural people, especially lower castes women and socially marginalized communities are facing problem of trouble-free communication and accessing information technologies. They are not able to communicate freely and use the technologies, because of the social control and economic factor. Indian women have traditionally been excluded from the external information sphere, both deliberately and because of lack of freedom or low levels of education. Empowerment of women involves many things - economic opportunity, social equality, and personal rights. Women are deprived of these human rights, often as a matter of tradition. In rural areas, women are generally not perceived to have any meaningful income generation capacity, and hence, they are relegated mainly to household duties and cheap labor. Without the power to work and earn a good income, their voices are silenced. Even in matters of sex and child bearing, women often do not have the ability to oppose the wishes of their men.

Women play a pivotal role in the development of any country. Women's status is the best indicator of progress of any nation. Status and development of women influence the development of country, as they not only constitute half of its population, but also influence growth of the remaining half of its population. The

women in rural areas are deprived of minimum facilities of enlightenment and education. The overwhelming majority of the labor that sustains life - growing food, cooking, raising children, caring for the elderly, maintaining a house, hauling water - is done by women, and, universally, this work is accorded low status and no pay. Need for Women's Empowerment: Studies aptly indicate that women are suffering from various types of problems due to lack of education and information. Thus, women's empowerment is necessary. Women's empowerment is one of the key factors in determining success of development. Right information given at the right time can empower the rural women and protect them from various problems. Various new information communication technologies, such as radio, television, mobile phone and internet are used for empowering the rural women via awareness, education and information. This is a new information communication technology era, but, until today, half of the women are suffering from various types of problems due to the gap between new information communication technologies and its use without needs assessments and participation of rural women's.

The digital divide between rich and poor, rural and urban, men and women, lower caste and upper caste have created huge gap in the accessibility of the new information communication technologies. The digital divide is often characterized by poverty, illiteracy, lack of computer literacy and language barriers. To overcome these constraints, some initiatives have been taken by Indian government. Today is the era of new information communication technology. Various new information communication technologies tools are used to educate and inform the rural female. For generations rural female have been living in complete isolation without much access to modern new media of communication. The development of a society largely depends on the access to information. Even though we live in the modern era, today, in the rural areas, women's are suffering from various problems such as less accessibility to modern information sources.

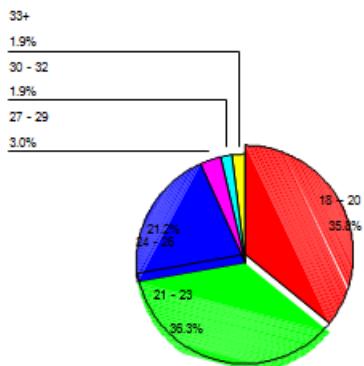
#### **IV. Research Methodology**

The aim of this research is to investigate the access and use of new information communication technologies among rural females in India. Therefore I did not rely on information gathering from urban classes, the information is collected a representative sample of rural population. In the present study I used questionnaire scheduled to collect the data. The present research is based on recent surveys of users and non-users of new information communication technologies in Karnataka state. The present study is in nature of descriptive which employs survey method. The broad area of survey research encompasses any measurement procedures that involve asking questions of the respondents. A "survey" can be anything forms a short paper-and-pencil feedback from to an intensive one-on-one in-depth interview. In this present study I used the questionnaire schedules for data collection. Questionnaires are an inexpensive way to gather data from a potentially large number of respondents. A well-designed questionnaire that is used effectively can gather information on both the use and access of new information communication technologies performance of the respondents. The target population of this study is rural females, and those who are not getting the access and use of the new information communication technologies services.

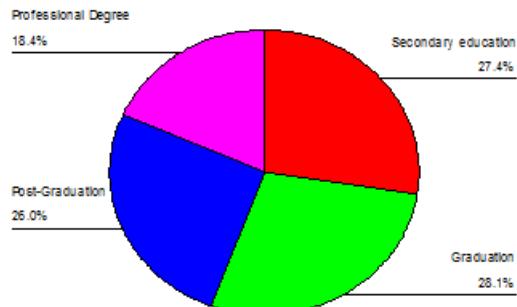
This micro study is conducted in three selected semi-urban villages in Tumkur District of Karnataka state. The descriptive research design is formulated for the study and the data were collected through questionnaire schedules, informal discussion and observation. Data were collected from 430 rural females aged between 18 to 35 years. The selected respondents are literate, students working and house wives. From each village 150 respondents were selected for study. Observation took place while the respondents were using cell phone and Internet centers. The researcher also observed how the respondents handled the technologies and their discussion among their peers about these technologies.

#### **Profile of the respondents**

##### **Age wise respondent's**



##### **Educational background of the respondents**



The sample under study comprised 430 rural females, the majority of them young females they are under the age of 35 years. There are 154 (35.81%) respondents are in the age group of 18-20, there are 156 (36.27%) are in the age group of 21-23. The age group of 24-26 respondents are 91(21.16%) and 13 (3.02%), 8 (1.86%) respondents are in the age group of 27 to 29 and 30-32, only 8 (1.86%) respondents are in the age group 33 years and above. In respect of education wise there are 27.44 percent of respondents are secondary education level, 28.13 percent of respondents are graduates, 26.04 percent of respondents are post-graduate and 18.37 percent of responders are having professional educational background.

## V. Findings and Analysis

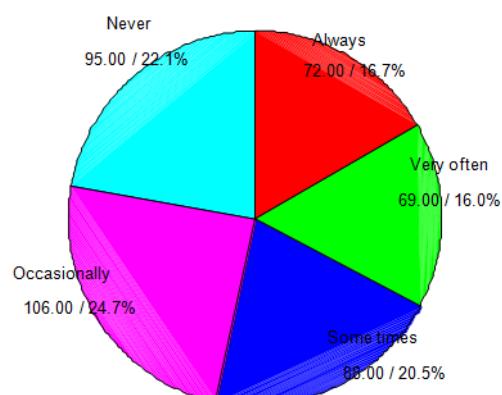
Collected data were entered manually into Microsoft Excel. Statistical Package for Social Science (SPSS) was used to analyze the data. Out of 500 question schedule were distributed to respondents irrespective of age educational background. Finally I have received 450 schedules in that 20 question scheduled were rejected due to non-completion of the questionnaire and finally 430 were selected for analysis. Out of 430 respondents

**Table 1.1 Accesses of New Information Communications Technologies**

	Frequency	Percent
Do you have computer in your home	Yes	57
	No	373
	Total	430
Do you have mobile phone?	Yes	312
	No	118
	Total	430
Do you have Internet connection in your home?	Yes	18
	No	412
	Total	430

The above table 1.1 shows that the access of new information communications technologies among Indian rural female respondents, out of 430 respondents 57 (13.25%) were having computer in their home and 373 (86.74%) respondents have expressed they do not have computer in their home. In respect of access of mobile phone 72.55% of respondents said they have mobile with them and still 27.44% of rural educated females don not access mobile. Access to Internet only 4.18% of respondents said they have Internet facilities in their home and around 96% percent said they do not have Internet facilities in their home. The above table statistics show that there is a wider gap of access of new communication technologies between rural and urban, means the penetration of Internet is very less in rural area and access to it also very less. Still the most important communication of mobile access and use among rural female is very low. The present table indicate that the divide of rural and urban females access and use of new information communication technologies. Many scholars have argued that the mobile communication is an effective and very useful in rural areas, as the present study also find that the use of mobile among rural females is very high and in case of computer usage is very low because of computer literacy in rural areas is very less compare to urban centers. Rural females are often precluded from making use of new information communication technologies because of low levels of computing and technology skills and very important literacy skills.

**Pie Chart Using of Internet among Rural Females**



The above pie chart show that how rural females use Internet for different purposes. There are 16.7 percent rural educated females use Internet always, 16.00 percent rural females use Internet very often and 20.5% rural female respondents express they use Internet some times, nearly 24.7% rural female have said they use Internet occasionally and 22.1% rural female respondent have said they never use the Internet at all. The above pie chart is clearly shows that there is a digital divide because there are rural educated females does not use Internet and even the users are sometimes or occasionally it means they are not very much familiar of using the new information communication technologies always.

**Table 1.2 Internet use on hourly basis by rural female respondents**

	Frequency	Percent
Less than one hour	270	62.79
More than one hour	26	6.04
More than two hours	22	5.11
More than three hours	17	3.95
Never	95	22.09
Total	430	100

Table 1.3 reveals that the Internet using among rural females an every day. Out of 430 respondents 270 (62.79%) respondents use Internet less than one hour in a day, 26 (6.04%) respondents say they use Internet more than hour in a day, 22 (5.11%) respondents' express they use Internet more than two hours in a day, and only 17 (3.95%) respondents use Internet more than three hours in a day. The above table shows that majority of respondents use Internet in very limited time means less than one hour, it shows rural females are not spend more time with using Internet, because Internet access and use is very low in rural areas.

**Table 1.3 the purposes of use new information communication technologies**

	Frequency	Percent
To get information	31	7.2
To chat with friends	46	10.69
For entertainment	41	9.53
Play games	36	8.37
To connect with others	47	10.93
For e-mail	31	7.2
Educational purpose	37	8.6
To pass leisure time	38	8.83
To learn culture	18	4.18
For some other purpose	10	2.32
Never use	95	22.09
Total	430	100

Table 1.3 reveals that there are 31 (7.2%) of rural females use Internet and other new information communication technologies for information purposes, 46 (10.69%) of rural female use Internet for chat with friends, 41(9.53%) of respondents says that they use Internet and other new information communication technologies for the purposes of entertainment, 36(8.37%) of respondents opined they use Internet for to play video games, there are 47 (10.93%) of respondents of rural females said they using Internet to connect with others, there are 7.2%, 8.6% and 8.83% respondents use new information communication technologies for e-mail, educational purposes and pass leisure time and only 4.18 percent and 2.32 percent of respondents use Internet and other new information communication technologies for to learn culture and some other purpose. There is an majority of rural female respondents is 22.09 percent are never use Internet and new information communication technologies even in modern era. It is clearly shows that there is a strong digital divide among rural female and urban females use of new information communication technologies.

New information communications technologies have become a global phenomenon and attracted extensive population from all around the world in different ages, genders, education levels, etc. In addition to routinely checking e-mails, reading daily forums instant message tools, people now use these new information communication technologies for different purposes and mainly for communication. Table 1.3 reveals that the use and access of new information communication technologies among rural females for different purpose. In the above table indicates that rural female respondents use new information communication technologies for get

information. Several studies shows that urban population are using Internet and new information communication technologies compare to rural population. There are studies have find the digital divide between rural and urban. The present research is perfectly noted that there is a exact digital divide between rural female and urban female use of new information communication technologies.

The present study findsthat the rural females in India are to access and use of new information technologies in every day in their daily lives. The research is to try to find the focus of new information communication technologies and reaching it in rural areas and access it by rural females. There is a small on scale reach of these technologies in rural areas and access also is very limit because of skills and literacy. Rural females are often precluded from making use of new information communication technologies because of low levels of computing and technology skills and also very importantly literacy skills. This is also a significant factor in preventing rural females from using and accesses the new information communication technologies. The main barriers are lack of telecommunication infrastructure with sufficient reliable bandwidth for Internet connections and cost, the ability to purchase, rent without financial hardship and necessity equipment. This result is in lack of access to new information communication technologies. The dependent and ownership of these technologies are also limit of access and use by rural females. Another important aspect of barriers of digital divide is the language. Most of the Indians do not speak English; all widely-sued operating systems require some knowledge of English. This is also another important aspect of the digital divide.

Like all other influencing factor of access and use of new information communication technologies the education also considered as one of the important influencing factor to access and use of Internet in the society. The present study is concentrate only educated rural female with different educational levels and background. There are around 22% and more respondents have opined they never use Internet. It is clearly shows that even well-educated rural females are not even access and use of new information communication technologies. This is the absolute digital divide. The present study finds that there is even educated rural females do not access and use of these technologies has as yet failed to touch the lives of the average citizen in the rural areas as even is more in rural females. Digital divide also arise from these rural female population and relevance of content designed to these rural females. These would include divides arising from parameters like education, class urban-rural and gender.

The present research further found that the access to the Internet and new information communication technologies is confined mainly to the urban centers in India and the rural areas remain beyond that ambit of new technology. Hence connecting rural areas is a bigger challenge, because subscription are geographically dispersed, sparsely populated and economically week. It is a challenging task to the government to reach this population that to rural females. Affordability and reach of these technologies have created a wider digital divide among gender and even rural-urban divide. The access and use of these technologies by rural female is created a wider gap among rural-urban females. The findings of the current study indicating that rural females do not use the new information communication technologies and Internet for their information and educational purposes.

## **VI. Conclusions**

The digital divide can never contained in isolation but the effort has to be multi-dimensional and multi-pronged. New information communication technologies are one of the enabling tools to bridge digital divide in India. The access and use of information communication technologies among rural female are surprisingly different over all the levels we can see, traces of difference between urban and rural female access of Internet users. Internet users tend to be younger, well-educated and they are economically sound. Another more obvious difference is the gender divide showing that the share of female users in considerably very lower in rural areas. The present research is to investigate the problems of access and use of new information communication technologies by rural females. A limitation in our study is the lack of information about male and non-users of new information communication technologies and Internet. To expand the knowledge of the digital divide within the nation we need to know more about the non-users of new information communication technologies or information poor's the people that are not using Internet today. Therefore this study might be followed up by collecting data from a sample of non-users in the same social and economic contexts as the users, and even from with no Internet access at all. Digital divide is not only lack of computers and connection but also not using information communication technologies for their benefits in terms of better information access, better education, health care and so on.

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